

**Chapter 16.08**  
***PENDING STATE APPROVAL***

**CARBON MONOXIDE DETECTORS**

**16.08.010 Carbon Monoxide Detectors Required in Residential Rental Units.**

Every residential rental unit shall be equipped with at least one approved carbon monoxide detector in accordance with the standards and guidelines promulgated by the National Fire Alarm Code 2007 Edition as established by National Fire Protection Association 720 if said unit contains one of the following:

- (1) A fuel-fired heater;
- (2) A fuel-fired appliance;
- (3) A working and accessible fireplace; or
- (4) An attached garage.

**16.08.020 Location.**

(a) A carbon monoxide detector shall be centrally located outside of each separate sleeping area in the immediate vicinity of the bedrooms.

(b) Each carbon monoxide detector shall be located on the wall or other location as specified in the installation instructions that accompany the detector.

**16.08.030 Power Supplies.**

(a) All power supplies shall have sufficient capacity to operate the alarm signals for at least 12 continuous hours.

(b) For electrically powered carbon monoxide detectors, the primary (main) power source shall be ac, unless otherwise permitted by the following:

- (1) Detectors shall be permitted to be powered by a monitored dc circuit of a control unit when power for the control unit meets the requirements of this section and the circuit remains operable upon loss of primary (main) ac power.
- (2) A detector and a wireless transmitter that serves only that detector shall be permitted to be powered from a monitored battery primary (main) source where part of a listed, monitored, low-power radio (wireless) system.

(c) Power Supply—Monitored Battery. Carbon monoxide detectors shall be permitted to be powered by a battery, provided that the battery is monitored to ensure that the following conditions are met:

- (1) All power requirements are met for at least 1 year of battery life, including monthly testing.
- (2) A distinctive audible trouble signal sounds before the battery is incapable of operating the detector(s) (from causes such as aging or terminal

corrosion) for alarm purposes.

- (3) Automatic transfer is provided from detector to a trouble condition for a unit employing a lock-in alarm feature.
- (4) The detector is capable of producing an alarm signal for at least 12 hours at the battery voltage at which a trouble signal is normally obtained, followed by note less than 7 days of trouble signal operation.
- (5) After the initial 4 minutes of alarm, the 5-second “off” time of the alarm signal shall be permitted to be changed to 60 seconds  $\pm$  10 percent.
- (6) The audible trouble signal is produced at least once every minute for 7 consecutive days.
- (7) Acceptable replacement batteries are identified by the manufacturer’s name and model number on the detector near the battery compartment.
- (8) A visible indication is displayed when a primary battery is removed from the detector.
- (9) Any detector that uses a non-rechargeable battery as a primary power supply that is capable of a 10-year or greater service life, including testing, and meets the requirements of 16.08.030(d)(3) shall not require a replacement battery.
- (10) A visible “power on” indicator is provided.

(d) Additional Power Supply. Carbon monoxide detectors are also permitted to obtain their primary power from the building’s own permanent wiring provided such wiring is served from a commercial source.

#### **16.08.040 Equipment Performance.**

(a) Each carbon monoxide detector shall be in compliance with ANSI/UL 2034, *Standard for Signal and Multiple Station Carbon Monoxide Alarms*.

(b) All signals produced from periodic testing of carbon monoxide detectors shall be identical to the signal produced when the detector is in alarm.

#### **16.08.050 Installation.**

(a) All carbon monoxide detectors shall be installed in accordance with the manufacturer’s instructions.

(b) All carbon monoxide detectors shall be supported independently of their attachment to wires.

(c) All carbon monoxide detectors shall be located and mounted so that accidental operation will not be caused by jarring or vibration.

(d) All carbon monoxide detectors shall be tested in accordance with the instructions provided by the supplier or installing contractor to ensure operation after installation.

(e) All carbon monoxide detectors shall be restored to their normal mode of operation after each alarm test.

#### **16.08.060 Maintenance and Testing.**

- (a) If batteries are used as a source of energy, they shall be replaced in accordance with the instructions provided by the manufacturer.
- (b) Detectors shall be inspected and tested in accordance with the manufacturer's instructions at least once a month.
- (c) The carbon monoxide detectors required under this Title shall be either battery-powered, plug-in with battery back-up, or wired into the residential rental unit's electrical system and have a battery backup, or is connected to an electrical system via an electrical panel.
- (d) The carbon monoxide detector shall be operable at the time a tenant takes possession of the residential rental unit.
- (e) The carbon monoxide detector shall meet the performance requirements of 7.4.2 and 7.4.4 of *NFPA 72, National Fire Alarm Code* and *ANSI/UL 2034, Standard for Single and Multiple Station Carbon Monoxide Alarms*.
- (f) The carbon monoxide detector shall be installed in accordance with the manufacturer's specifications.

#### **16.08.070 Tenant's Responsibilities Regarding Carbon Monoxide Detectors.**

- (a) It is the responsibility of a tenant to test the carbon monoxide detectors within his/her residential rental unit.
- (b) The tenant is responsible for replacement of any required batteries in the carbon monoxide detector in the tenant's residential rental unit, except that the owner shall ensure that the batteries are in operating condition at the time the tenant takes possession of the residential rental unit.
- (c) The tenant shall be responsible for notifying the owner if the tenant becomes aware of an inoperable or deficient carbon monoxide detector within his/her residential rental unit.

#### **16.08.080 Owner's Responsibilities Regarding Carbon Monoxide Detectors.**

- (a) It is the responsibility of the owner to ensure that any batteries necessary to make the carbon monoxide detectors in his/her residential rental unit operational are provided to the tenant at the time the tenant takes possession of the residential rental unit.
- (b) The owner shall correct any reported deficiencies or inoperabilities in a carbon monoxide detector installed in his/her residential rental unit when made aware of any such deficiency or inoperability.

#### **16.08.090 Effective Date.**

This Chapter shall go into effect on August 1, 2014.